Background
The transition from A-level to university has gained considerable attention in recent years. Research suggests that students experience multifaceted challenges as they begin university study (Torenbeek, Jansen and Hofman, 2010), which are often attributed to ineffective pre-university education (European Molecular Biology Organisation, 2006; Suto, 2012). In particular, it has been suggested that new undergraduates lack important academic skills and knowledge needed for university study (e.g. Booth, 2001; Porter, Cartwright and Snelgar, 2006), and that the format and style of assessments in higher education pose challenges for students. At the school/college level, the British government is spearheading the reform of A-levels in England and Wales to ensure better preparation for university study, through greater collaboration between schools/colleges and universities in curricular re-developments. Universities are also addressing these deficits in a number of ways (Mehta, Suto and Brown, 2012). Three main approaches towards providing additional academic support have been identified: (i) ‘bolt on’ study skills courses which are offered as standalone modules; (ii) ‘built in’ integrated modules which embed the development of transferable skills with knowledge building within a subject area, and (iii) using particular pedagogical techniques to develop specific skills during lectures and other regular teaching activities.

Thus far relatively little research has directly compared assessment practices at A-level and university, nor examined the content of additional support lessons from the perspective of those involved in school to university transitions, namely A-level teachers, students and university lecturers. This paper presents research exploring transitional challenges for students of biology, English and mathematics. Three questions were addressed:

1. What is the focus of additional support lessons at university?
2. What are lecturers’, undergraduates’, and A-level teachers’ views of the content of these lessons?
3. How do assessment practices at A-level and at university compare?

Methods
Case studies of additional support lessons were conducted at English, mathematics and biology departments in nine contrasting universities (three per subject). All the universities offered ‘built-in’ additional support to first-year undergraduates. Qualitative data collection sessions comprised: lecturer and student interviews; lesson observations by researchers and an A-level teacher; and facilitated discussions between the teacher and lecturers. The case study data was transcribed, coded and analysed thematically. Comparisons across
participants and universities related to multiple themes including the knowledge and skills covered in the additional support lessons, and recommendations for changes to be made to the content taught at A level.

A desk-based comparison of assessment-related documentation was conducted. Assessment materials were obtained for mainstream A-level courses in English literature, biology and mathematics, and for first-year study in those subjects at sixteen university courses. The materials included past examination papers, mark schemes, course handbooks and syllabuses. A coding framework was developed and applied to the materials for each course. This facilitated qualitative and/or quantitative analyses of eleven factors, including assessment variety, timing of assessments, written guidance provided to students, scaffolding of assessment, and re-sit opportunities.

Findings
For both biology and English, the focus of additional support was on developing subject-related transferable skills such as drawing graphs and carrying out literature reviews, whereas in mathematics, the focus was on specific mathematical content. The A-level teachers who observed the lessons felt that there was some scope either for introducing new topics, or for emphasizing existing topics, in their subjects at A-level. Participants agreed that the additional support lessons were useful in developing critical thinking and academic writing skills. The method used in this study facilitated participating teachers’ understanding of academic expectations at university. Furthermore, it also developed lecturers’ awareness of A-level content in their subjects. This increased understanding of school and university contexts facilitated the discussions between lecturers and teachers about potential changes at A-level, and about the feasibility of these recommendations.

A greater diversity of summative assessment types was found at university compared to A-level. Furthermore, considerable variation among universities and subjects was found. Several assessment types, for example oral assessments, were identified at university, but not at A-level in the subjects explored. This mismatch between assessment at A-level and university may indicate that differences in the type of assessment are (at least partially) responsible for new university students’ initial difficulties. However Suto (2012) found that university lecturers reported student strengths in oral work, which was not assessed at school/college, indicating that a close match between A-level and university assessment structure may be unnecessary. Furthermore, compared to A-level assessments, university assessments contained similar or greater levels of guidance, particularly for assessments which were probably new to students.

This study shows that the responsibility for preparing students for higher education needs to be shared by schools/colleges and universities. At A-level, it is important to understand the learning and assessment expectations at university, in order to adjust accordingly A-level syllabuses and assessments to better prepare students for university study. However, given the diversity of the university sector, it would not be feasible for A-levels to prepare students for every type of assessment which they may encounter at university. Similarly, universities will benefit from an increased awareness of new undergraduates’ previous knowledge and assessment experiences to align the first-year teaching and assessment with students’ prior
experiences. Curricular reforms at A-level may not be able to overcome all problems of transition, and there may always be a need for some additional academic support at university. However, a dialogue between the key stakeholders could help to ensure that the gap between school/college and university is more manageable, and they could facilitate the transition for students. The methodology used in this study could be replicated to compare assessments and determine possible areas for curricular reforms in other subjects and at other educational levels.

References


